

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/940,474
Attorney Docket No. Q65911

REMARKS

Claims 1, 2 and 4-12 are all the claims pending in the application. Claim 1 has been amended. Support for the amendment to Claim 1 can be found in the specification, such as on page 8. Therefore, no new matter has been added.

Claims 1, 2 and 4-12 have been rejected under 35 U.S.C. § 102(e), as allegedly being anticipated by U.S. Patent No. 6,447,958 to Shinohara et al. (“Shinohara ‘958”).

Applicants respectfully traverse this rejection.

Claim 1 presently recites that the thickness of the spacer is from 0.02 to 3 μm .

It is the Examiner’s position that the “particle coating” of Shinohara ‘958 is a layer which dually functions as both a shut-down layer and a spacer. *See*, page 7 of the Office Action. Shinohara ‘958 discloses that a fine particle-like suspension of the thermoplastic polymer is coated on the dried coated film and dried to form a fine particle layer of the thermoplastic resin. *See*, col. 10, lines 3-6.

However, Shinohara ‘958 fails to disclose, teach or suggest that the particle coating thereof has a thickness from 0.02 to 3 μm . Shinohara ‘958 contains no disclosure regarding the thickness of the particle coating at column 10, lines 1-10. Further, Shinohara ‘958 fails to disclose a thickness of the particle coating that provides superior electric capacity and load characteristic.

Further, Claims 2 and 4-11 depend directly or indirectly from Claim 1. Therefore, Applicants respectfully submit that Claims 2 and 4-11 are patentable for at least the same reasons as Claim 1.

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Additionally, Claim 12 recites that separator comprises in order the shut-down layer, the heat-resistant microporous layer and the spacer.

In contrast, Shinohara '958 fails to disclose the location at which the particle coating appears in the non-aqueous electrolyte battery separator thereof. That is, Shinohara '958 provides a general disclosure that fails to describe that the order in the non-aqueous electrolyte battery separator thereof is shut-down layer, heat-resistant microporous layer, and spacer.

Shinohara '958 discloses a method of obtaining a dried coated film that can be used as the non-aqueous electrolyte battery separator. *See*, col. 9, line 23 to col. 10, line 10. In disclosing the method of producing the dried coated film, Shinohara '958 discloses depositing a heat-resistant nitrogen-containing aromatic polymer on a coated film. *See*, col. 9, lines 42-43. As described above, Shinohara '958 discloses that a fine particle-like suspension of the thermoplastic polymer is coated on the dried coated film and dried to form a fine particle layer of the thermoplastic resin. *See*, col. 10, lines 3-6.

However, when Shinohara '958 discloses that the particle-like layer is coated onto the dried coated film, Shinohara '958 fails to describe whether the particle-like suspension is coated onto the heat-resistant nitrogen-containing aromatic polymer therein or the coated film therein. If the spacer is coated onto the coated film thereof, the order would be the particle coating, the coated film, and the heat-resistant nitrogen-containing aromatic polymer. This is not the order recited in Claim 12. In this regard, Shinohara fails to describe, teach or suggest that the order is the shut-down layer, the heat-resistance microporous layer and the spacer.

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In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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